

April 15, 2004

To: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572 28 Davis Avenue Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/808,801 03/24/04

Tien-I Bao et al.

METHOD FOR FORMING OPENINGS IN LOW-K DIELECTRIC LAYERS

## INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April  $\mathcal U$ , 2004.

Stephen B. Ackerman, Reg. # 37761

Signature/Date

## TSMC-02-262CIP

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- U.S. Patent 6,365,320 to Foote et al., "Process for Forming Anti-Reflective Film for Semiconductor Fabrication Using Extremely Short Wavelength Deep Ultraviolet Photolithography," discloses a process for an ARL.
- U.S. Patent 6,376,392 to Lee et al., "PECVD Process for ULSI ARL," discloses a process for a ARL.
- U.S. Patent 6,159,871 to Loboda et al., "Method for Producing Hydrogenated Silicon Oxycarbide Films Having Low Dielectric Constant," reveals a process for a H:SiOC layer.
- U.S. Patent 5,926,740 to Forbes et al., "Graded Anti-Reflective Coating for IC Lithography," cited an amorphous silicon oxycarbide ARL formed either by high temperature pyrolysis of silicone resins, or by PECVD from silane, methane, and nitrous oxide precursors.
- U.S. Patent 6,121,130 to Chua et al., "Laser Curing of Spin-On Dielectric Thin Films," discusses procedures for application and curing of methyl silsesquioxane low-k polymer films.
- U.S. Patent 6,168,726 to Li et al., "Etching an Oxidized Organo-Silane Film," cites a number of oxygen free fluorocarbon etchants for Black Diamond and for HSQ.

## TSMC-02-262CIP

- U.S. Patent 6,372,661 to Lin et al., "Method to Improve the Crack Resistance of CVD Low-k Dielectric Constant Material," discusses a process using a ARL layers.
- U.S. Patent 6,054,379 to Yau et al., "Method of Depositing a Low K Dielectric with Organo Silane," describes a CVD method.
- U.S. Patent Application Publication US 2003/0134495 A1 to Gates et al., "Integration Scheme for Advanced BEOL Metallization Including Low-K Cap Layer and Method Thereof," discloses an advanced back-end-of-line (BEOL) metallization structure.

Sincerely,

Stephen B. Ackerman,

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